A Novel Nasal TSE-PAP Mask/Circuit Assembly to Provide Continuous Active Oxygenation in Pediatric Patients and Difficult Airway Patients with Rare Syndromes and Poor Face-Mask Fit during GA Induction and Endotracheal Intubation

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The novel nasal TSE-PAP mask circuit assembly has been shown to maintain oxygenation by delivering nasal CPAP, BiPAP or PPV in obese patients with OSA and/or difficulty airway during sedation or awake/asleep endotracheal intubation. However, it has seldom been used in pediatric patients. The pediatric patients with limited oxygen reserve and difficult airway should also be benefitted from continuous nasal oxygenation. This Exhibit demonstrates how to assemble the simple nasal TSE-PAP mask/circuit using pediatric face masks and existing anesthesia equipment in less than 2 minutes. The Exhibit consists of hand-on manikin and video demonstrations of techniques to provide continuous active oxygenation with nasal CPAP, BiPAP and PC ventilation. It shows the benefits of nasal oxygenation in pediatric patients with/without difficult airway during GA induction and intubation with/without video-laryngoscopy or fiberoptic bronchoscopy. It also demonstrates the use of the nasal mask in patients with rare Syndromes (CHARGE, ROHHAD, Williams, Fragile X, etc.) and poor face-mask fit due to dysmorphic facial features during GA induction and difficult endotracheal intubation. By maintaining oxygenation, this simple technique allows calm attempts in endotracheal intubation and may improve patient safety.